**Introduction and status of the claims**

• Claims 1-18, 20-25, 47, and 48 are now pending in this application.

• Claim 1-3, 8, 9, 11, 13, 17, 20, and 22-25 have been amended to define still more clearly what Applicants regard as their invention.

• Claims 19 and 26-44 have been canceled without prejudice or disclaimer of subject matter.

• Claims 47 and 48 are in independent form.

**Note on the claim amendments**

New claim 47 is based on former claim 26 and has been combined with former claim 27 and amended to further clarify the present invention. Claims 1 to 18 and 20 to 25 are now dependent on new claim 47. Claims 19 and 26 to 44 have been canceled. New claim 48 has been added and, Applicants submit, is based on the specification and claims as filed and does not add new matter. Applicants confirm that any deletion or cancellation herein is not to be considered to be an abandonment of subject matter and Applicants reserve the right to reintroduce these in future amendments.

**The rejection under 35 U.S.C. § 101**

Claims 1-27 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner's reasoning is provided on page 2 of the Office Action.

New claim 47, from which claims 1-18 and 20-25 depend, recites a method implemented on a computer having a processor and a memory coupled to said processor. It is submitted

that claim 47 and its dependent claims are directed to statutory subject matter for at least this reason.

## The rejections under 35 U.S.C. §§ 102 and 103

Claims 1-14 and 19-41 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,179,618 to Stone.

Claims 15-18 and 42-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,179,618 to Stone in combination with U.S. Patent No. 5,688,118 to Hayka, et al.

Applicants submit that independent claims 47 and 48, together with the claims dependent therefrom, are patentably distinct from the cited references for at least the following reasons.

The Examiner considers that claims 1-14 and 19 to 41 lack novelty over Stone. Applicants respectfully submit that the amended claims are not disclosed or suggested by Stone.

The present invention relates to real-time training assessment simulations and the creation of these simulations within operational service units, such as call centers or customer service centers. Broadly, personnel (either an individual or group) can also be trained where a time-based, time-critical assessment is required to validate learning. In particular, a system and method are provided for creating a training scenario for provision to personnel in which a plurality of stages and a plurality of simulated events within the stages are created, as mentioned in the summary of the invention. Each of the events created have a description of the event for provision to the personnel together with the plurality of variables defining effects of the event on the scenario.

The present invention is capable of being used by both government and commercial organizations for training and testing their emergency response staff, enabling them to perform their job within a simulator before handling the real task. The present invention is capable of simulating the organizations own systems and providing an environment in which they can design their own scenarios for personnel (either an individual or group). Advantageously, an organization can build their own scenarios for an unlimited number of incidents and unlimited types of incidents. Further, the scenario can be run across multiple personnel across multiple agencies (in the case of a government or commercial organization).

Further, the present invention also discloses means for tracking participant inputs, behaviors, responsiveness to events, and actions carried out for subsequent analysis, as mentioned on, e.g., page 22-23 of the description[1]. From this tracking, a competency assessment and reporting of results can be provided. Further, interaction with the organization's own software applications (such as communication systems, etc.) can be provided.

In a further advantage, the ability to generate tailored scenarios allows the organization to simulate their own work environment as it currently stands but easily adapting as their business changes. Further, the present invention allows the organization to track their interaction with one or more linked live systems. Linked live systems could include incident management systems, geospatial information mapping systems, traffic management systems, weather tracking systems, financial systems, or the client's own proprietary software (such as a Supervisory Control And Data Acquisition SCADA system). Each can be linked into the

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[1] It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

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invention to train and test for scenarios involving unlimited types of incidents. Advantageously, this provides for a further level of realism to the scenario that has been created.

It is envisaged that organizations such as a national/state transport agency, border protection agencies, and local emergency services would use this system to develop their own scenarios for training of personnel, as mentioned on pages 1 and 2 of the description. Further, the ability to design scenarios is useful in measuring cognitive load in humans to test the biometric impact of stress on humans responsible for dealing with critical incidents. Without the flexibility of the present invention, it will be difficult for any of these organizations to train and test their emergency response staff.

The present invention also allows for creation of a scenario for training with a plurality of simulated events within stages which are executed in a pre-determined sequence at predetermined times according to a clock within the scenario. Advantageously, the clock provides the scenario time within a scenario, the scenario time being discontinuous, and assigns a scenario time for each of the simulated events to occur within the scenario (the events occurring in real-time). Advantageously, this provides for real-time simulation for training processes that are time-critical.

In a further advantage, a training scenario having a plurality of stages and a plurality of simulated events all occurring according to a clock allows a fully customizable interactive simulation system. A user of the system can simulate a series of events, for example a crisis, prior to this event actually happening. This will allow the personnel (either an individual or a group) using the training scenario to test and perfect their response to the scenario. In another embodiment there is an opportunity for the user to assess and process results of personnel

using the scenario. In one embodiment of the present invention at least one of the simulated events includes at least one variable, each variable providing at least one parameter of the scenario. This parameter may be the time of the event within the scenario, the urgency of the event, the suggested response to the event, and/or the correct response to the event. Advantageously, this also provides for a more realistic training scenario.

The present invention allows the assignment of a plurality of different roles within the scenario being created, such that events within the scenario can be assigned to at least one role and events assigned to each role can be provided to different personnel concurrently. Advantageously, this also provides for a more realistic training scenario as personnel must work together as would happen in a real-time critical situation.


**Stone**

Stone teaches techniques for improving A.I. in a flight combat game in which a player completes a number of missions. However, Stone fails to disclose a method or system for creating a training scenario having a plurality of stages and a plurality of simulated events within the stages as taught by claims 47 and 48.

Stone discloses systems and methods for enhancing the realism of computer controlled artificial intelligence units for competitive gaming. Applicants note that Stone does not refer to "stages" events or "scenarios," and does not disclose a computer-based simulation system for training it comprises a scenario simulated event.

**Hakya**

Hakya et al discloses a simulation system for training dental work on artificial teeth. Hakya does not disclose a scoring scheme or any performance evaluation; rather, the Examiner suggests that "a common scoring scheme is a well established concept in the art of the simulation system". Applicants submit that Hakya et al does not teach or suggest comparison of real time responses, a means of recording an assessor's evaluation of the responses, or any automatic comparison of the evaluator responses, as taught by claims of the present invention.

Applicants submit that Stone or Hayka cited by the Examiner neither discloses nor suggests the claims of the present invention for reasons given below.

None of the cited citations teach or suggest present claims 47 and 48 or their dependent claims. In particular, neither Stone nor Hayka teach a method for creating a training scenario for provision to personnel. The present invention is capable of simulating an organization's own systems and providing an environment in which they can design their own scenarios for single or multiple personnel. In contrast, Stone includes one or more predetermined scenarios (i.e. missions) which are programmed by a programmer years in advance of the release and use of the game by the player. There is no scope for creating any training scenario or one or more different training scenarios. Nor does Hayka provide ability to create scenarios on the fly.

Accordingly, claims 47 and 48, and their dependent claims, are novel and inventive over Stone or Hayka, and in particular:

With regard to claim 4, neither Stone nor Hayka discloses (creating or providing) a scenario in which parameters within an event being one of time of the event within the

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scenario, urgency of the event, suggested response to the event, and correct response to the event.

    With regard to claim 9, neither Stone nor Hakya discloses assigning different roles associated with an event within the scenario that has been created in the signing an event to different personnel concurrently. In contrast, one player of the computer game which stone may provide (or possibly multi player or A.I. players) all carry out the same role/aim, that is to defeat the enemy in the pre-defined scenario. In the present invention, for example, it is envisaged that a supervisor may be responsible for one role and associated event and a subordinate may be responsible for another role within an event such that the subordinate must wait until his supervisor has carried out the event associated with his role prior to the subordinate carrying out the event. There is no teaching or suggestion of this feature by Stone or Hakya.

    With regard to claims 14 to 18, Stone is silent with regard to evaluating responses from personnel, comparing with predetermined responses, providing an output of responses for review by an assessor, recording the assessor's evaluation of the responses and certifying the personnel as meeting a predetermined level of competence. Further, unlike the present invention, Stone has no disclosure of how any of the above is achieved in the context of creating a training scenario and evaluating whether or not the personnel who carried out the training learned anything or has improved.

    In view of the above, Applicants respectfully submit that none of the citations teach or suggest the claims of the present invention as currently amended. Absent the teachings of the present invention, there is no reason or motivation for someone presented with the cited Stone or Hakya to alter them to provide the system and method in which a user can create multiple

different scenarios for training including a plurality of stages and a plurality of simulated events within the stages to be executed in a predetermined sequence at predetermined times according to a clock such that the simulated events occur within the scenario, but occur at real-time.

The present invention provides a method of creating a training a scenario for provision to training personnel across a wide range of organizations and this is not in Stone or Hakya. This is effectively a very adaptable tool to create training scenarios in any organization. It need not be limited to a particular game or scenario. An advantage of the present invention is that the training scenario can be tailored to a particular organization. Further still, the training scenario can be changed and updated as required within the organization. Further, as evidenced by the drawings and the specification, the system of the present invention allows the user to easily create their own training scenario and does not require programming skills.

In view of the amendments and the above comments, Applicants submit that the present claims are both novel and inventive over Stone or Hakya.

## Conclusion

In view of the above comments and the amendments, Applicants respectfully request favorable reconsideration of this application.

Respectfully submitted,

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